



GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

157 Short Street, Bishop, California 93514-3537

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www.gbuapcd.org

May 23, 2014

Subject: Keeler Dunes Dust Control Project Meteorological Setting

Additional Plot Information:

All meteorological data used for summary plots are collected at the Keeler met tower located adjacent to the community of Keeler, CA (UTM X 421356.3, UTM Y 4038807).

Site report from 2013 Draft Network Monitoring Plan attached.

Temperature:

PLOT: Keeler Temperature – Daily Maximum, Minimum and Average

Data for this plot spans a period of 28 years. Maximums, Minimums and averages are for this entire 28 year period for each calendar day beginning January 1st and ending December 31st. This summary provides a range of temperatures (between max and min) and likely close to the average, that would be expected in the Keeler Dunes Dust Control Project area on any given calendar day based on almost three decades of District temperature measurements. Periods during the year where freezing conditions are experienced can be derived by denoting days where minimums fall below 0 °C (32 °F).

Precipitation:

PLOT: Keeler Precipitation

Data for this plot spans a period of 28 years. Due to sporadic nature of precipitation events at the Keeler Dunes Dust Control Project area and yet at times voluminous, this plot combines maximum daily and monthly sums. With maximum daily sums superimposed on the maximum monthly sums, the driest month of April, May and October become clearly apparent while the wettest month with the largest events in July and August also stand out and finally, the wet months of late fall and winter (November – February) where precipitation events are smaller but, more frequent, are not lost between the extremes.

Windy Days:

PLOT: Keeler Precipitation

Data for this plot spans a period of 29 years. Wind events with blowing sand in the Keeler Dunes Dust Control Project area can occur on any given day of the year. In this plot, only days where winds surpass the threshold to move sand size particles in the dune filed at an hourly average wind speed of 7.5 meters per second (~17 miles per hour) or greater are used for the ‘Windy Days’ summary. In regards to frequency of days with winds strong enough to have blowing sand, the windiest months occur in the spring while the calmer months are in the fall and winter.



GBUAPCD Site Report

Great Basin Unified Air Pollution Control District
157 Short Street
Bishop, CA 93514
760.872.8211 / <http://www.gbuapcd.org>

Site Name: **Keeler MET**

Site Number: 697	TEOM Installed?: No		
County: Inyo	Monitor Type: None - the TEOMs are installed separately and reported separately		
FIPS Code: 06-027	Met Installed?: Yes		
AIRS Number: 1003	Site Operator: Dan Johnson	UTM X: 421739	
Current: Yes	Collecting Agency: GBUAPCD	UTM Y: 4038590	

Location:	Northeast of Keeler, CA		
Address:	Keeler, CA		
Distance to Road:	75 meters		
Traffic Count:	3/day		
Groundcover:	sand/brush		
Representative Area:	Community of Keeler		
Pollutant:	N/A		
Monitor Objective:	Local Meteorology		
Spatial Scale:	Neighborhood Scale	Start Date:	3/14/1985
Sampling Method:	N/A	Operation Schedule:	5 minute
Analysis Method:	N/A	Sampling Season:	Year-round
Probe Height:	10 meters		
Distance to Supporting Structure:	N/A		
Distance from Obstructions on Roof:	N/A		
Distance from Obstructions Not on Roof:	20 meters to trees		
Distance From Trees:	20 meters		
Distance to Furnace or Incinerator:	N/A		
Distance Between Collocated Monitors:	N/A		
Unrestricted Airflow:	N/A		
Probe Material:	N/A		
Residence Time:	N/A		
Will there be a change in 18 months?:	No		
Suitable comparison against annual PM2.5?:	N/A		
Frequency of flow rate verification for manual PM sampler audit:	N/A		
Frequency of flow rate verification for automated PM analyzers audit:	N/A		
Frequency of one-point QC check (gaseous):	N/A		

- Meteorological Variables:**
- Variable: Temperature
 - Variable: Barometric Pressure
 - Variable: Precipitation
 - Variable: Wind Speed
 - Variable: Wind Direction
 - Variable: Relative Humidity



Site Name: **Keeler MET**

Site Photo:



North-facing photo:



East-facing photo:



West-facing photo:



South-facing photo:

